PATENT Customer No. 22,852 Attorney Docket No. 05725.0636-00000

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Jean-Marc ASCIONE et al.	) Group Art Unit: 1751
Application No.: 09/881,807	) Examiner: E. B. Elhilo
Filed: June 18, 2001	) )
For: COMPOSITIONS COMPRISING A CATIONIC HOMOPOLYMER AND THEIR USE FOR STABILIZATION OF AN OXIDIZING SOLUTION	<i>)</i> ) Confirmation No.: 8671 ) )

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Sir:

## **APPEAL BRIEF UNDER BOARD RULE § 41.37**

In support of the Notice of Appeal filed February 23, 2005, and further to Board Rule 41.37, Appellants present this brief. A check for the fee of \$500.00 required under 37 C.F.R. § 1.17(c) is enclosed. A petition for a two month extension of time accompanies this Appeal Brief, which is timely filed.

This Appeal responds to the November 22, 2004, final rejection of claims 1, 2, 6-57, 61-112, and 116-168, which are set forth in the attached Appendix. If any additional fees are required or if the enclosed payment is insufficient, Appellants request that the required fees be charged to Deposit Account No. 06-0916.

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# Real Party In Interest

L'ORÉAL S.A. is the real party in interest, as evidenced by the assignment document filed in the U.S. Patent and Trademark Office on October 9, 2001, and recorded at Reel 012249 and Frame 0750.

# **Related Appeals and Interferences**

There are currently no other appeals or interferences, of which Appellants, Appellants' legal representative, or assignee are aware, that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

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### **Status Of Claims**

Claims 1-168 are pending in this application. No claims have been allowed.

Claims 3-5, 58-60, and 113-115 have been objected to as dependent upon a rejected base claim. Claims 1, 2, 6-57, 61-112, and 116-168 have been finally rejected under 35 U.S.C. § 103(a). A complete listing of the pending claims is included in the attached appendix.

# **Status Of Amendments**

No amendments have been filed under 37 C.F.R. § 1.116.

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#### **Summary Of Claimed Subject Matter**

Keratinous materials, such as hair, are often exposed to oxidizing compositions when undergoing treatments such as dyeing, bleaching, permanent waving, or relaxing/straightening. (Specification at p. 1, lines 11-14.) A challenge in preparing such oxidizing compositions arises in achieving chemical stability of the oxidizing agent and physical stability of the oxidizing composition. (*Id.* at p. 2, lines 17-19.) Physical stability can lead to homogeneous oxidizing activity. (*Id.* at p. 2, lines 19-20.) If the oxidizing activity is nonhomogeneous, problems can result in safety and/or performance, and/or variation in viscosity. (*Id.* at p. 2, line 20 to p. 3, line 2.)

The inventors have discovered that the use of at least one cationic homopolymer, at least one fatty alcohol, at least one alkoxylated fatty alcohol, and at least one fatty amide in an oxidizing composition may result in a physically stable composition. (*Id.* at p. 3, lines 3-8.) The at least one cationic homopolymer comprises repeating units of formula (I), shown below:

$$\begin{bmatrix}
R_{1} & R_{3} \\
 & | & | \\
 & C & C
\end{bmatrix}$$

$$\begin{bmatrix}
R_{2} & C = O \\
 & | & OR_{4}
\end{bmatrix}$$
(I)

wherein:

-  $R_1$ ,  $R_2$ , and  $R_3$ , which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and

- R<sub>4</sub> is chosen from groups comprising at least one quaternary amino group. (*Id.* at p. 3, line 12 to p. 4, line 3.) Thus one embodiment of the invention is a composition comprising (a) at least one cationic homopolymer comprising repeating units of formula (I), (b) at least one fatty alcohol, (c) at least one alkoxylated fatty alcohol, (d) at least one fatty amide, and (e) at least one oxidizing agent. (*Id.* at p. 3, lines 9-12; *see also* claim 1.)

Another embodiment of the invention is a method for providing physical stability to an oxidizing composition comprising including in the oxidizing composition (a) at least one cationic homopolymer comprising repeating units of formula (I), (b) at least one fatty alcohol, (c) at least one alkoxylated fatty alcohol, and (d) at least one fatty amide. (*Id.* at p. 5, lines 13-17; *see also* claim 57.)

The specification also discloses a method for treating keratinous fibers comprising applying to the keratinous fibers at least one treatment composition comprising an oxidizing composition, wherein the oxidizing composition comprises (a) at least one cationic homopolymer comprising repeating units of formula (I); (b) at least one fatty alcohol; (c) at least one alkoxylated fatty alcohol; and (d) at least one fatty amide is provided. (*Id.* at p. 6, lines 3-8; *see also* claim 110.)

An additional embodiment of the invention is a multi-compartment kit for the chemical treatment of keratinous fibers, wherein the kit has at least two separate compartments. (*Id.* at p. 6, lines 10-12; *see also* claim 166.) The first compartment comprises an oxidizing composition comprising at least one cationic homopolymer comprising repeating units of formula (I), at least one fatty alcohol, at least one alkoxylated fatty alcohol, and at least one fatty amide. (*Id.* at p. 6, lines 12-14; *see also* 

claim 166.) The second compartment comprises a composition for chemical treatment of the fibers. (Id. at p. 6, lines 15-16; see also claim 166.)

# **Grounds of Rejection**

A. Claims 1, 2, 6-31, 40-48, 52-57, 61-86, 95-103, 107-112, 116-141, 150-158, and 162-168 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 6,315,989 to Narasimhan et al. ("*Narasimhan*") in view of U.S. Patent No. 5,735,908 to Cotteret et al. ("*Cotteret*").

B. Claims 32-39, 49-51, 87-94, 104-106, 142-149, and 159-161 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 6,315,989 to Narasimhan et al. ("*Narasimhan*") in view of U.S. Patent No. 5,735,908 to Cotteret et al. ("*Cotteret*") and further in view of U.S. Patent No. 6,156,076 to Casperson et al. ("*Casperson*").

#### <u>Argument</u>

- A. Claims 1, 2, 6-31, 40-48, 52-57, 61-86, 95-103, 107-112, 116-141, 150-158, and 162-168 Are Patentable Under 35 U.S.C. § 103(a) over *Narasimhan* in View of *Cotteret*.
  - 1. The criteria for making a prima facie case of obviousness are clearly set forth in the M.P.E.P. and in case law

To establish a *prima facie* case of obviousness, the Office must satisfy three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 2143 (8th ed. Rev. 2, 2004).

"The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." M.P.E.P. § 2142. In doing so, "all the words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Further, the Federal Circuit has opined that "virtually all [inventions] are combinations of old elements." *See e.g., In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998) (citations omitted). In fact, the Federal Circuit in *Rouffet* explained that very often an examiner may find every element of a claimed invention in the prior art but mere identification is not sufficient to negate patentability. *Id.*, 47 U.S.P.Q.2d at 1457. Instead, the court stated that "the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the

claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *Id.*, 47 U.S.P.Q.2d at 1457. As such, evidence to select the specific elements may "flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved." *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 U.S.P.Q.2d 1626, 1630 (Fed. Cir. 1996).

2. The rejection of record fails to set forth a prima facie case of obviousness.

The Office asserts that *Narasimhan* teaches all of the claimed ingredients except for the at least one cationic homopolymer comprising the repeating units of formula (I). (May 20, 2004, Office Action at pages 2-3.) To remedy this deficiency, the Office relies on *Cotteret* for disclosing the use of polyquaternium-37. (*Id.* at pages 3-4.) The Office concludes that it would have been obvious to modify the composition of *Narasimhan* "by incorporating the cationic polymer of polyquaternium 37 as taught by Cotteret ... with a reasonable expectation of success." (*Id.* at page 4.) To support this conclusion, the Office further asserts that *Narasimhan* suggests the use of cationic polymers and that *Cotteret* "clearly teaches the polymer of polyquaternium 37 which is structurally similar to those claimed." (*Id.*)

The examiner, however, has not met his burden of factually supporting a *prima* facie conclusion of obviousness." Like in *Rouffet*, the examiner may have found every element of a claimed invention in the prior art, but the mere identification is not sufficient to negate patentability. As explained in detail below, the examiner has failed to show the reasons that the skilled artisan, confronted with the same problems as the inventor

and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

A. Only with hindsight would one of ordinary skill in the art combine the teachings of Narasimhan and Cotteret

Because *Narasimhan* fails to teach a claimed cationic homopolymer of formula (I), the Office turned to *Cotteret* for its teaching of polyquaternium-37. The Office, however, provides no rationale for selecting *Cotteret* and more specifically for selecting polyquaternium-37 from among the polymers taught by *Cotteret* other than that it is "in analogous art of hair dyeing composition." (May 20, 2004, Office Action at page 3.)

There are countless numbers of polymers in the analogous art of hair dyeing. But the Office has failed to provide the requisite motivation for selecting this specific polymer over all others.

The specific selection of polyquaternium-37 from *Cotteret* can only be arrived at with hindsight. *Cotteret* discloses, generally, oxidation dye compositions that include "at least one cationic or amphoteric substantive polymer." *See Cotteret* at abstract.

Cotteret devotes two columns to describe exemplary polymers that can be used. *See* col. 3, line 26 to col. 4, line 55. However, there is no disclosure in *Cotteret*, or *Narasimhan*, that indicates that polyquaternium-37, or any other cationic homopolymer comprising repeating units of formula (I), is especially desirable. Instead, polymers which are <u>not</u> cationic homopolymers comprising repeating units of formula (I) are taught by *Cotteret* as preferred. *See* col. 3, line 65 to col. 4, line 55. Thus, one of skill in the art would be lead away from polyquaternium-37. Appellants respectfully submit that it is only with the instant invention as a blueprint that the Office selects

polyquaternium-37 from *Cotteret* and combines it with *Narasimhan*. The Federal Circuit concluded in *Rouffet*, however, that this is not enough to support a *prima facie* case of obviousness based on a combination of references. *See In re Rouffet*, 149 F.3d at 1357, 47 U.S.P.Q.2d at 1457.

B. Selecting the claimed ingredients (b) to (e) from Narasimhan amounts to hindsight picking and choosing

The Office also provides no rationale for selecting the claimed ingredients (b) to (e) from *Narasimhan*. Appellants respectfully contend that it is not enough to point to isolated passages in a reference to establish a *prima facie* case of obviousness; instead, the references must suggest the desirability of the combination. *See, e.g., In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). The Federal Circuit has repeatedly discouraged such hindsight picking and choosing. For example, a compound containing three components, *i.e.*, a substituted heterocycle, a bridge, and a polar tail, was found to be nonobvious in view of two prior art patents. *Yamanouchi Pharmaceutical Co., Ltd. v. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 56 U.S.P.Q.2d 1641 (Fed. Cir. 2000). The court found no motivation to combine portions of one compound from a prior art patent with a piece of another compound in a second prior art patent:

Specifically, Danbury did not show sufficient motivation for one of ordinary skill in the art at the time of invention to take any one of the following steps, let alone the entire complex combination: (1) selecting example 44 as a lead compound, (2) combining the polar tail from example 44 with the substituted heterocycle from tiotidine, and (3) substituting the carbamoyl (CONH2) group in the intermediate compound with a sulfamoyl group (SO2NH2) to create famotidine.

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Id. at 1344-1345, 56 U.S.P.Q.2d at .

Narasimhan describes a microemulsion peroxide composition comprising, (I) a peroxide composition, and (II) an aqueous alkaline composition. Narasimhan at col. 3, line 1 and col. 9, line 7. The peroxide composition (I) comprises, (A) an aqueous phase, (B) a continuous oil phase, and (C) an organic surface active ingredient. *Id.* at col. 3, lines 3-7. The aqueous alkaline composition comprises "at least one interactive surfactant." *Id.* at col. 9, lines 9-12. The dyeing composition is formed by mixing the aqueous alkaline composition with the peroxide composition. *Id.* 

In the peroxide composition (I), the aqueous phase (A) comprises:

- 1. water,
- 2. hydrogen peroxide,
- 3. optionally penetration enhancers,
- 4. optionally monohydric alcohols, and
- 5. "other ingredients"

Id. at col. 3, lines 8-60.

The continuous oil phase (B) can comprise:

- 1. volatile oils, which can be chosen from volatile hydrocarbons,
- 2. nonvolatile oils, which can be chosen from
  - (a) nonvolatile organic oils, which can be chosen from.
    - (i) esters.
    - (ii) hydrocarbons,
    - (iii) fatty alcohols.
    - (iv) lanoline and derivatives thereof, and

(v) other ingredients.

Id. at col. 4, line 61 to col. 5, line 22.

The organic surface active ingredient (C) can be chosen from:

- 1. nonionic surface active ingredients, which can be chosen from,
  - (a) **alkoxylated alcohols**, including aliphatic, aromatic, or heterocyclic alcohol with an alkylene oxide ... preferably a **fatty alcohol** having 10-22 carbon atoms
  - (b) sorbitan derivatives,
  - (c) glyceryl ethers
  - (d) glyceryl esters,
  - (e) dialkyl sulfoxides,
  - (f) polyethylene oxide condensates of alkyl phenols,
  - (g) condensation products of ethylene diamine,
  - (h) long chain tertiary amine oxides,
  - (i) long chain tertiary phosphine oxides,
  - (j) polyhydroxy fatty acid amides, and
  - (k) alkyl polysaccharides,
- 2. anionic surfactants, which can be chosen from,
  - (a) alkyl sulfates,
  - (b) fatty acids esterified with isethionic acid,
  - (c) succinates or succinimates,
  - (d) olefin sulfonates, and
  - (e) N-acyl amino acids.

Id. at col. 5, line 23 to col. 9, line 5.

The aqueous alkaline composition can comprise one or more of the following ingredients,

- A. an interactive surfactant, which can be chosen from,
  - 1. amphoteric surfactants,
  - 2. zwitterionic surfactants, and
  - 3. cationic surfactants,
- B. oxidative dye intermediates, which can be chosen from,
  - 1. primary intermediates and couplers
- C. "other ingredients," which can be chosen from
  - 1. penetration enhancers,
  - 2. preservatives,
  - 3. chelating agents,
  - 4. pH adjusters,
  - 5. protein derivatives,
  - 6. plant extracts,
  - 7. oils, and
  - 8. cationic conditioning polymers chosen from
    - (a) quaternary derivatives of cellulose ethers,
    - (b) copolymers of vinylpyrrolidone having a specified monomer unit,

(c) homopolymer of dimethyldiallylammonium chloride, or copolymer of dimethyldiallylammonium chloride and acrylamide, and

(d) homopolymers or copolymers derived from acrylic methacrylic acid wherein the monomer units are selected from the group consisting of acrylamide, methylacrylamide, diacetone-acrylamide, acrylamide or methacrylamide substituted on the nitrogen by lower alkyl, alkyl esters of acrylic acid and methacrylic acid, vinylpyrrolidone, and vinyl esters.

Id. at col. 9, line 7 to col. 15, line 38.

The ingredients in boldface indicates the Office's citations to support the *prima* facie case of obviousness. Clearly the Office had to search through layers of the disclosure to arrive at ingredients (b) - (e) of the claimed invention. The cited prior art provides no direction to choose the claimed ingredients from the lists of numerous possible ingredients and the Office has failed to show any motivation to choose and combine the claimed ingredients. Instead the Office picks the claimed ingredients (b) - (e) from among numerous possible ingredients and deems their selection and combination obvious.

Moreover, the examples *Narasimhan* would lead one of skill in the art away from the claimed combination of ingredients. Example 3 of *Narasimhan*, cited by the Office, as well as Example 5, disclose a composition for oxidative dyeing. These examples do not include an alkoxylated fatty alcohol, a fatty amide, or the claimed cationic homopolymer. Three of the five claimed ingredients, ingredients (a), (c), and (d), are

therefore missing from the Examples. The remaining examples in *Narasimhan* omit even more of the claimed ingredients. These examples are consistent with the teaching in *Narasimhan* that the cationic conditioning polymers are just one of several optional "other ingredients." *See* col. 13 at line, 37 to col. 15, line 38.

Thus the teachings of *Narasimhan*, taken for all they contain, would not lead the ordinary artisan to select the recited ingredients from among the large number of possible ingredients taught by *Narasimhan*. Further, given the large number of alternative ingredients and optional ingredients, the chances of arriving at the claimed combination of ingredients would be very low absent any motivation to specifically select and combine these ingredients, and the Office has not pointed out why the ordinary artisan would have this needed motivation. Accordingly, Appellants respectfully submit that *Narasimhan* does not, contrary to the Office's position, provide sufficient teaching so that the ordinary artisan need only substitute a cationic homopolymer comprising repeating units of formula (I) for the cationic homopolymers taught by *Narasimhan*. Instead, the ordinary artisan must pick and choose from among numerous alternatives to arrive at even a form of the claimed composition lacking the cationic homopolymer comprising repeating units of formula (I).

- B. Claims 32-39, 49-51, 87-94, 104-106, 142-149, and 159-161 Are Patentable Under 35 U.S.C. § 103(a) over *Narasimhan* in View of *Cotteret* and Further in View of *Casperson*.
  - 1. The rejection of record fails to set forth a prima facie case of obviousness.

The Office relies upon *Casperson* for teaching the use of alkoxylated fatty alcohol of laureth-23, and fatty amides of lauramide and cocamide. (May 20, 2004, Office Action at page 5.) According to the Office, *Casperson* teaches claimed species within the genus of alkoxylated fatty alcohols and the genus of fatty amides taught for use in dying compositions by *Narasimhan*, so that the ordinary artisan would have been motivated to substitute any species within each genus with a reasonable expectation that they would have similar properties. (*Id.* at pages 5-6)

Appellants respectfully submit that *Narasimhan* and *Cotteret* have been improperly combined, as discussed above. *Casperson* also fails to provide any reasons for the ordinary artisan to select the claimed invention from the wide variety of potential formulations set forth in *Narasimhan*. Again, the Office has engaged in hindsight based on the knowledge gleaned from Appellants' claims. As discussed above, such hindsight analysis is improper. Because *Casperson* does not remedy the deficiencies present in the teachings of the primary references, its teaching of individual species of alkoxylated fatty alcohols and fatty amides is irrelevant.

The more general consideration of the teachings of *Casperson* with those of *Narasimhan* and *Cotteret* also do not render the claimed invention obvious. *Casperson* teaches the inclusion of at least one polyether polyurethane in a two-part dye composition to afford thickening properties to the composition. *See, e.g.,* col. 3, lines 15-29. Although *Casperson* mentions that surfactants including alkoxylated fatty alcohols may be included in the dye composition, *Casperson* teaches that the surfactant need not be included in the oxidizing composition, but instead may be present in the dye composition. *See* col. 4, lines 7-26, especially lines 21-26. *Casperson*, therefore,

although teaching certain alkoxylated fatty alcohols, does not provide any motivation to include an alkoxylated fatty alcohol specifically within the oxidizing composition, let alone include one of the specific compounds recited in claims 32, 87, or 142.

Appellants respectfully submit that the Office has once again simply used Appellants' specification as a blue print with which to hunt through the patent literature in search of some mention of the compounds recited in the claims. Absent some suggestion in the references of the desirability of the combination, however, the requisite motivation is lacking and the Office has failed to establish a *prima facie* case with respect to claims 32, 87, and 142.

The Office also relies upon the teaching in *Casperson* at col. 7, lines 31-41, and col. 10, Example 10, as a basis for including the various fatty amides recited in claims 33-39. 88-94, and 143-149 in the composition within the percent relative weights recited in claims 49-51, 104-106, and 159-161. May 20, 2004, Office Action, page 5. *Casperson*, however, uses the fatty amides as rheology modifiers that can be included in either component of the composition. *See* col. 7, lines 29-31. Thus even if the ordinary artisan were to select from among the suitable rheology modifiers a fatty amide as recited, *Casperson* does not teach any advantage or benefit to including the fatty amide in the oxidizing composition, rather than in the dye composition. Appellants respectfully submit that the ordinary artisan would not have been motivated by the teachings of *Casperson* to include a fatty amide in any oxidizing composition, and certainly not an oxidizing composition within the scope of the instant claim at the percentage weights claimed. Accordingly, the Office has failed to establish a *prima* 

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facie case of obviousness with respect to claims 33-39, 49-51, 88-94, 104-106, 143-

149, and 159-161.

Conclusion

For the reasons given above, pending claims 1-168 are allowable and reversal of

the Office's rejection is respectfully requested. Appellants respectfully submit that the

Office has engaged in improper hindsight reconstruction of the claimed invention using

the specification as a blueprint. The Office has failed to point to reasons why the

ordinary artisan would have been motivated to select and combine the particular

ingredients of the composition of the instant claims. Accordingly, Appellants respectfully

submit the Office has failed to establish a prima facie case.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain

entry of this Appeal Brief, such extension is respectfully requested. If there are any fees

due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any

fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees

to our Deposit Account No. 06-0916.

Dated: June 23, 2005

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW.

GARRETT & DUNNER, L.L.P.

FOR >

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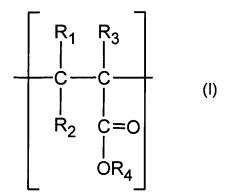
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## Claims Appendix to Appeal Brief Under Rule 41.37(c)(1)(viii)

- 1. (Original) A composition comprising:
- (a) at least one cationic homopolymer comprising repeating units of formula (I):



wherein:

- R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub>, which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
  - R<sub>4</sub> is chosen from groups comprising at least one quaternary amino group;
- (b) at least one fatty alcohol;
- (c) at least one alkoxylated fatty alcohol;
- (d) at least one fatty amide; and
- (e) at least one oxidizing agent.
- 2. (Original) The composition according to claim 1, wherein said composition is physically stable.
- 3. (Original) The composition according to claim 1, wherein said alkyl groups of  $R_1$ ,  $R_2$  and  $R_3$  are chosen from linear  $C_1$  to  $C_{20}$  alkyl groups, branched  $C_1$  to  $C_{20}$  alkyl

groups and cyclic  $C_1$  to  $C_{20}$  alkyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkyl groups are optionally substituted.

- 4. (Original) The composition according to claim 1, wherein said alkenyl groups of  $R_1$ ,  $R_2$  and  $R_3$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl groups, branched  $C_1$  to  $C_{20}$  alkenyl groups and cyclic  $C_1$  to  $C_{20}$  alkenyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.
- 5. (Original) The composition according to claim 1, wherein  $R_1$ ,  $R_2$ , and  $R_3$  are each H.
- 6. (Original) The composition according to claim 1, wherein  $R_1$  is H,  $R_2$  is H and  $R_3$  is  $CH_3$ .
- 7. (Original) The composition according to claim 1, wherein, in the definition of  $R_4$ , said groups comprising at least one quaternary amino group are chosen from  $C_1$  to  $C_{20}$  alkyl quaternary amino groups.
- 8. (Original) The composition according to claim 1, wherein, in the definition of R<sub>4</sub>, said groups comprising at least one quaternary amino group are chosen from compounds of formula (II):

wherein:

- R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub>, which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and

- R<sub>8</sub> is chosen from alkylene groups and alkenylene groups.
- 9. (Original) The composition according to claim 8, wherein said alkyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkyl groups, branched  $C_1$  to  $C_{20}$  alkyl groups, and cyclic  $C_1$  to  $C_{20}$  alkyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkyl groups are optionally substituted.
- 10. (Original) The composition according to claim 8, wherein said alkenyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl groups, branched  $C_1$  to  $C_{20}$  alkenyl groups, and cyclic  $C_1$  to  $C_{20}$  alkenyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.
- 11. (Original) The composition according to claim 8, wherein said alkylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkylene groups, branched  $C_1$  to  $C_{20}$  alkylene groups, and cyclic  $C_1$  to  $C_{20}$  alkylene groups, and further wherein said  $C_1$  to  $C_{20}$  alkylene groups are optionally substituted.
- 12. (Original) The composition according to claim 8, wherein said alkenylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkenylene groups, branched  $C_1$  to  $C_{20}$  alkenylene groups and cyclic  $C_1$  to  $C_{20}$  alkenylene groups, and further wherein said  $C_1$  to  $C_{20}$  alkenylene groups are optionally substituted.

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13. (Original) The composition according to claim 8, wherein said groups comprising at least one quaternary amino group are chosen from:

$$(CH_3)_3N^+-CH_2^-;$$
  
 $(CH_3)_3N^+-(CH_2)_2^-;$   
 $(CH_3)_3N^+-(CH_2)_3^-;$  and

(CH<sub>3</sub>)<sub>3</sub>N<sup>+</sup>-(CH<sub>2</sub>)<sub>4</sub>-.

- 14. (Original) The composition according to claim 8, wherein  $R_5$  is a methyl group,  $R_6$  is a methyl group,  $R_7$  is an alkyl group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkyl groups, and  $R_8$  is an alkylene group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkylene groups.
- 15. (Original) The composition according to claim 8, wherein  $R_5$ ,  $R_6$ , and  $R_7$  are each a methyl group, and  $R_8$  is an alkylene group chosen from linear  $C_2$  to  $C_{10}$  alkenylene groups, branched  $C_2$  to  $C_{10}$  alkenylene groups.
- 16. (Original) The composition according to claim 1, wherein said at least one cationic homopolymer is chosen from polyquaternium-37 homopolymers.
- 17. (Original) The composition according to claim 1, wherein said at least one fatty alcohol comprises at least 8 carbon atoms.
- 18. (Original) The composition according to claim 17, wherein said at least one fatty alcohol comprises at least 10 carbon atoms.

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19. (Original) The composition according to claim 18, wherein said at least one fatty alcohol comprises at least 12 carbon atoms.

- 20. (Original) The composition according to claim 1, wherein said at least one fatty alcohol is chosen from  $C_9$ - $C_{11}$  alcohols,  $C_{12}$ - $C_{13}$  alcohols,  $C_{12}$ - $C_{15}$  alcohols,  $C_{12}$ - $C_{16}$  alcohols, and  $C_{14}$ - $C_{15}$  alcohols.
- 21. (Original) The composition according to claim 1, wherein said at least one fatty alcohol is chosen from arachidyl alcohol, behenyl alcohol, caprylic alcohol, cetearyl alcohol, cetyl alcohol, coconut alcohol, decyl alcohol, hydrogenated tallow alcohol, jojoba alcohol, lauryl alcohol, myristyl alcohol, oleyl alcohol, palm alcohol, palm kernel alcohol, stearyl alcohol, tallow alcohol, and tridecyl alcohol.
- 22. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol is chosen from fatty alcohols comprising at least one polyethylene glycol ether.
- 23. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol comprises at least 8 carbon atoms.
- 24. (Original) The composition according to claim 23, wherein said at least one alkoxylated fatty alcohol comprises at least 10 carbon atoms.
- 25. (Original) The composition according to claim 24, wherein said at least one alkoxylated fatty alcohol comprises at least 12 carbon atoms.

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26. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol is chosen from ethoxylated fatty alcohols of the formula  $R(OCH_2CH_2)_nOH$ 

wherein:

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted; and
  - n ranges from 2 to 100.
- 27. (Original) The composition according to claim 26, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.
- 28. (Original) The composition according to claim 26, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups, and cyclic  $C_8$  to  $C_{22}$  alkenyl groups.
- 29. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol is chosen from alkoxy esters of polyglyceryl of formula  $R(OCH_2CHOHCH_2)_nOH$

and alkoxy esters of polyglyceryl of formula

H(OCH<sub>2</sub>CHOR'CH<sub>2</sub>)<sub>n</sub>OH

wherein:

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted;

- R' is chosen from H; linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted; and - n ranges from 1 to 30,

with the proviso that at least one of said R' is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted, and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl

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groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted.

- 30. (Original) The composition according to claim 29, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.
- 31. (Original) The composition according to claim 29, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups, and cyclic  $C_8$  to  $C_{22}$  alkenyl groups.
- 32. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol is chosen from ceteareth-2, ceteareth-3, ceteareth-4, ceteareth-5, ceteareth-6, ceteareth-7, ceteareth-8, ceteareth-9, ceteareth-10, ceteareth-11, ceteareth-12, ceteareth-13, ceteareth-14, ceteareth-15, ceteareth-16, ceteareth-17, ceteareth-18, ceteareth-20, ceteareth-22, ceteareth-23, ceteareth-24, ceteareth-25, ceteareth-27, ceteareth-28, ceteareth-29, ceteareth-30, ceteareth-33, ceteareth-34, ceteareth-40, ceteareth-50, ceteareth-55, ceteareth-60, ceteareth-80, ceteareth-100, laureth-1, laureth-2, laureth-3, laureth-4, laureth-6, laureth-7, laureth-8, laureth-9, laureth-10, laureth-11, laureth-12, laureth-13, laureth-14, laureth-15, laureth-16, laureth-20, laureth-23, laureth-25, laureth-30, laureth-40, deceth-3, deceth-5, oleth-5, oleth-30, steareth-2, steareth-10, steareth-20, steareth-100, cetylsteareth-12, ceteareth-5, ceteareth-5, polyglyceryl 4-lauryl ether, polyglyceryl 4-oleyl ether, polyglyceryl 2-oleyl ether, polyglyceryl 6-cetyl ether,

polyglyceryl 6-oleylcetyl ether, polyglyceryl 6-octadecyl ether,  $C_9$ - $C_{11}$  pareth-3,  $C_9$ - $C_{11}$  pareth-6,  $C_{11}$ - $C_{15}$  pareth-3,  $C_{11}$ - $C_{15}$  pareth-12,  $C_{11}$ - $C_{15}$  pareth-12,  $C_{11}$ - $C_{15}$  pareth-12, and  $C_{22}$ - $C_{24}$  pareth-33.

33. (Original) The composition according to claim 1, wherein said at least one fatty amide is chosen from fatty amides of formula

$$R_9$$
— $CH_2$ — $C$ — $N$ 
 $R_{10}$ 
 $R_{11}$ 

wherein:

- R<sub>9</sub> is chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted; and alkoxylated alkyl groups of formulae

$$R_{12}-O\left(CH_2-CH_2-O\right)_n$$

and

$$R_{13}$$
-O- $\left(CH_2$ -CH-CH<sub>2</sub>-O $\right)_m$ 

wherein:

- R<sub>12</sub> and R<sub>13</sub>, which may be identical or different, are each chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted;

- n ranges from 1 to 10; and
- m ranges from 1 to 6; and
- R<sub>10</sub> and R<sub>11</sub>, which may be identical or different, are each chosen from H; linear alkyl groups, branched alkyl groups and cyclic alkyl groups, wherein said alkyl groups are optionally substituted; and linear alkenyl groups, branched alkenyl groups and cyclic alkenyl groups, wherein said alkenyl groups are optionally substituted.
- 34. (Original) The composition according to claim 33, wherein  $R_9$  is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups and cyclic  $C_8$  to  $C_{22}$  alkyl groups, wherein said  $C_8$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups and cyclic  $C_8$  to  $C_{22}$  alkenyl groups, wherein said  $C_8$  to  $C_{22}$  alkenyl groups are optionally substituted.
- 35. (Original) The composition according to claim 33, wherein  $R_{10}$  and  $R_{11}$  are each chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$

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to  $C_{22}$  alkyl groups, wherein said  $C_1$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said  $C_1$  to  $C_{22}$  alkenyl groups are optionally substituted.

- 36. (Original) The composition according to claim 33, wherein at least one of said  $R_{10}$  and said  $R_{11}$  is chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said alkyl groups and said alkenyl groups are substituted with at least one hydroxyl group.
- 37. (Original) The composition according to claim 33, wherein at least one of said R<sub>10</sub> and said R<sub>11</sub> is chosen from linear C<sub>1</sub> to C<sub>22</sub> alkyl groups, branched C<sub>1</sub> to C<sub>22</sub> alkyl groups and cyclic C<sub>1</sub> to C<sub>22</sub> alkyl groups; and linear C<sub>1</sub> to C<sub>22</sub> alkenyl groups, branched C<sub>1</sub> to C<sub>22</sub> alkenyl groups and cyclic C<sub>1</sub> to C<sub>22</sub> alkenyl groups, wherein said alkyl groups further comprise at least one ether group in the alkyl chain, and further wherein said alkenyl groups further comprise at least one ether group in the alkenyl chain.
- 38. (Original) The composition according to claim 1, wherein said at least one fatty amide is chosen from behenamide, cetyl-PG hydroxyethyl decanamide, cetyl-PG hydroxyethyl palmitamide, cocamide, dibutyl lauroyl glutamide, distearyl phthalic acid amide, lauramide, lauroyl methyl glucamide, myristoyl-PG hydroxyethyl decanamide, oleyl palmitamide, stearamide, tallow amide, trideceth-2 carboxamide monoethanolamine (trideceth-2 carboxamide MEA), trideceth-2 carboxamide diethanolamine (trideceth-2 carboxamide DEA), trideceth-2 carboxamide

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monoisopropanolamine (trideceth-2 carboxamide MIPA), and polyalkoxylated fatty amides.

- 39. (Original) The composition according to claim 38, wherein said polyalkoxylated fatty amides are chosen from polyethoxylated fatty amides and polyglycerylated fatty amides.
- 40. (Original) The composition according to claim 1, wherein said at least one cationic homopolymer is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 41. (Original) The composition according to claim 40, wherein said at least one cationic homopolymer is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 42. (Original) The composition according to claim 41, wherein said at least one cationic homopolymer is present in an amount ranging from 0.25% to 2.5% by weight relative to the total weight of the composition.
- 43. (Original) The composition according to claim 1, wherein said at least one fatty alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 44. (Original) The composition according to claim 43, wherein said at least one fatty alcohol is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.

45. (Original) The composition according to claim 44, wherein said at least one fatty alcohol is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.

- 46. (Original) The composition according to claim 1, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 47. (Original) The composition according to claim 46, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 48. (Original) The composition according to claim 47, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.2% to 2% by weight relative to the total weight of the composition.
- 49. (Original) The composition according to claim 1, wherein said at least one fatty amide is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 50. (Original) The composition according to claim 49, wherein said at least one fatty amide is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.

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51. (Original) The composition according to claim 50, wherein said at least one fatty amide is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.

- 52. (Original) The composition according to claim 1, wherein said at least one oxidizing agent is chosen from hydrogen peroxides, bromate salts, percarbonate salts, perborate salts and enzymes.
- 53. (Original) The composition according to claim 1, wherein said at least one oxidizing agent is present in an amount ranging from 0.1% to 20.0% by weight relative to the total weight of the composition.
- 54. (Original) The composition according to claim 53, wherein said at least one oxidizing agent is present in an amount ranging from 0.5% to 12% by weight relative to the total weight of the composition.
- 55. (Original) The composition according to claim 1, further comprising at least one adjuvant chosen from anionic surfactants; cationic surfactants; nonionic surfactants other than said at least one alkoxylated fatty alcohol, said at least one fatty alcohol, and said at least one fatty amide; amphoteric surfactants; anionic polymers; cationic polymers other than said at least one cationic homopolymer comprising repeating units of formula (I); nonionic polymers; amphoteric polymers other than said at least one cationic homopolymer comprising repeating units of formula (I); inorganic thickeners; organic thickeners; conditioners; chelating agents; antioxidants; stabilizing agents; propellants; sequestering agents; emollients; humectants; fragrances; acidifying agents;

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basifying agents; moisturizing agents; vitamins; essential fatty acids; proteins; protein derivatives; preservatives; and opacifiers.

- 56. (Original) The composition according to claim 1, wherein said composition is in a form chosen from an aqueous emulsion, a suspension, a dispersion, an aerosol foam, a cream, a lotion, a solution, a paste, a gel, a spray, and a hydroalcoholic lotion.
- 57. (Original) A method for providing physical stability to an oxidizing composition comprising:

including in said oxidizing composition:

(a) at least one cationic homopolymer comprising repeating units of formula (I):

wherein:

- $R_1$ ,  $R_2$ , and  $R_3$ , which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
- R<sub>4</sub> is chosen from groups comprising at least one quaternary amino group;

(b) at least one fatty alcohol;

- (c) at least one alkoxylated fatty alcohol; and
- (d) at least one fatty amide;

wherein said at least one cationic homopolymer, said at least one fatty alcohol, said at least one alkoxylated fatty alcohol, and said at least one fatty amide are present in a combined amount effective to provide physical stability to said oxidizing composition.

- 58. (Original) The method according to claim 57, wherein said alkyl groups of R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are chosen from linear C<sub>1</sub> to C<sub>20</sub> alkyl groups, branched C<sub>1</sub> to C<sub>20</sub> alkyl groups, and cyclic C<sub>1</sub> to C<sub>20</sub> alkyl groups, and further wherein said C<sub>1</sub> to C<sub>20</sub> alkyl groups are optionally substituted.
- 59. (Original) The method according to claim 57, wherein said alkenyl groups of R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are chosen from linear C<sub>1</sub> to C<sub>20</sub> alkenyl groups, branched C<sub>1</sub> to C<sub>20</sub> alkenyl groups, and cyclic  $C_1$  to  $C_{20}$  alkenyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.
- 60. (Original) The method according to claim 57, wherein R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are each H.
- 61. (Original) The method according to claim 57, wherein R<sub>1</sub> is H, R<sub>2</sub> is H and R<sub>3</sub> is CH<sub>3</sub>.
- 62. (Original) The method according to claim 57, wherein, in the definition of R4, said groups comprising at least one quaternary amino group are chosen from C<sub>1</sub> to C<sub>20</sub> alkyl quaternary amino groups.

63. (Original) The method according to claim 57, wherein, in the definition of R<sub>4</sub>, said groups comprising at least one quaternary amino group are chosen from compounds of formula (II):

- R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub>, which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
- R<sub>8</sub> is chosen from alkylene groups and alkenylene groups.
- 64. (Original) The method according to claim 63, wherein said alkyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkyl groups, branched  $C_1$  to  $C_{20}$  alkyl groups, and cyclic  $C_1$  to  $C_{20}$  alkyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkyl groups are optionally substituted.
- 65. (Original) The method according to claim 63, wherein said alkenyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl chains, branched  $C_1$  to  $C_{20}$  alkenyl chains, and cyclic  $C_1$  to  $C_{20}$  alkenyl chains, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.

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66. (Original) The method according to claim 63, wherein said alkylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkylene groups, branched  $C_1$  to  $C_{20}$  alkylene groups, and cyclic  $C_1$  to  $C_{20}$  alkylene groups, and further wherein said  $C_1$  to  $C_{20}$  alkylene groups are optionally substituted.

- 67. (Original) The method according to claim 63, wherein said alkenylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl chains, branched  $C_1$  to  $C_{20}$  alkenyl chains, and cyclic  $C_1$  to  $C_{20}$  alkenyl chains, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.
- 68. (Original) The method according to claim 63, wherein said groups comprising at least one quaternary amino group are chosen from:

$$(CH_3)_3N^+-CH_2-;$$

$$(CH_3)_3N^+-(CH_2)_2-;$$

$$(CH_3)_3N^+$$
- $(CH_2)_3$ -; and

$$(CH_3)_3N^+-(CH_2)_4-.$$

- 69. (Original) The method according to claim 63, wherein  $R_5$  is a methyl group,  $R_6$  is a methyl group,  $R_7$  is an alkyl group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkyl groups, and  $R_8$  is an alkylene group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkylene groups.
- 70. (Original) The method according to claim 63, wherein  $R_5$ ,  $R_6$ , and  $R_7$  are each a methyl group, and  $R_8$  is an alkylene group chosen from  $C_2$  to  $C_{10}$  alkylene groups.

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71. (Original) The method according to claim 57, wherein said at least one cationic homopolymer is chosen from polyquaternium-37 homopolymers.

- 72. (Original) The method according to claim 57, wherein said at least one fatty alcohol comprises at least 8 carbon atoms.
- 73. (Original) The method according to claim 72, wherein said at least one fatty alcohol comprises at least 10 carbon atoms.
- 74. (Original) The method according to claim 73, wherein said at least one fatty alcohol comprises at least 12 carbon atoms.
- 75. (Original) The method according to claim 57, wherein said at least one fatty alcohol is chosen from  $C_9$ - $C_{11}$  alcohols,  $C_{12}$ - $C_{13}$  alcohols,  $C_{12}$ - $C_{15}$  alcohols,  $C_{12}$ - $C_{16}$  alcohols, and  $C_{14}$ - $C_{15}$  alcohols.
- 76. (Original) The method according to claim 57, wherein said at least one fatty alcohol is chosen from arachidyl alcohol, behenyl alcohol, caprylic alcohol, cetearyl alcohol, cetyl alcohol, coconut alcohol, decyl alcohol, hydrogenated tallow alcohol, jojoba alcohol, lauryl alcohol, myristyl alcohol, oleyl alcohol, palm alcohol, palm kernel alcohol, stearyl alcohol, tallow alcohol, and tridecyl alcohol.
- 77. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol is chosen from fatty alcohols comprising at least one polyethylene glycol ether.

78. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol comprises at least 8 carbon atoms.

- 79. (Original) The method according to claim 78, wherein said at least one alkoxylated fatty alcohol comprises at least 10 carbon atoms.
- 80. (Original) The method according to claim 79, wherein said at least one alkoxylated fatty alcohol comprises at least 12 carbon atoms.
- 81. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol is chosen from ethoxylated fatty alcohols of formula  $R(OCH_2CH_2)_nOH$

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted; and
  - n ranges from 2 to 100.
- 82. (Original) The method according to claim 81, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.

83. (Original) The method according to claim 81, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups, and cyclic  $C_8$  to  $C_{22}$  alkenyl groups.

84. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol is chosen from alkoxy esters of polyglyceryl of formula  $R(OCH_2CHOHCH_2)_nOH$ 

and alkoxy esters of polyglyceryl of formula

## H(OCH<sub>2</sub>CHOR'CH<sub>2</sub>)<sub>n</sub>OH

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted;
- R' is chosen from H; linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon

atoms, wherein said alkenyl groups are optionally substituted; and - n ranges from 1 to 30,

with the proviso that at least one of said R' is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted.

- 85. (Original) The method according to claim 84, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.
- 86. (Original) The composition according to claim 84, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups, and cyclic  $C_8$  to  $C_{22}$  alkenyl groups.
- 87. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol is chosen from ceteareth-2, ceteareth-3, ceteareth-4, ceteareth-5, ceteareth-6, ceteareth-7, ceteareth-8, ceteareth-9, ceteareth-10, ceteareth-11, ceteareth-12, ceteareth-13, ceteareth-14, ceteareth-15, ceteareth-16, ceteareth-17, ceteareth-18, ceteareth-20, ceteareth-22, ceteareth-23, ceteareth-24, ceteareth-25, ceteareth-27, ceteareth-28, ceteareth-29, ceteareth-30, ceteareth-33, ceteareth-34, ceteareth-40, ceteareth-50, ceteareth-55, ceteareth-60, ceteareth-80, ceteareth-100,

laureth-1, laureth-2, laureth-3, laureth-4, laureth-5, laureth-6, laureth-7, laureth-8, laureth-9, laureth-10, laureth-11, laureth-12, laureth-13, laureth-14, laureth-15, laureth-16, laureth-20, laureth-23, laureth-25, laureth-30, laureth-40, deceth-3, deceth-5, oleth-5, oleth-30, steareth-2, steareth-10, steareth-20, steareth-100, cetylsteareth-12, ceteareth-5, ceteareth-5, polyglyceryl 4-lauryl ether, polyglyceryl 4-oleyl ether, polyglyceryl 2-oleyl ether, polyglyceryl 6-cetyl ether, polyglyceryl 6-cetyl ether, polyglyceryl 6-oleylcetyl ether, polyglyceryl 6-octadecyl ether, C<sub>9</sub>-C<sub>11</sub> pareth-3, C<sub>9</sub>-C<sub>11</sub> pareth-6, C<sub>11</sub>-C<sub>15</sub> pareth-3, C<sub>11</sub>-C<sub>15</sub> pareth-5, C<sub>11</sub>-C<sub>15</sub> pareth-12, C<sub>11</sub>-C<sub>15</sub> pareth-20, C<sub>12</sub>-C<sub>15</sub> pareth-12, and C<sub>22</sub>-C<sub>24</sub> pareth-33.

88. (Original) The method according to claim 57, wherein said at least one fatty amide is chosen from fatty amides of formula

$$R_9$$
— $CH_2$ — $C$ — $N$ 
 $R_{10}$ 

wherein:

- R<sub>9</sub> is chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted; and alkoxylated

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alkyl groups of formulae

$$R_{12}-O\left(CH_2-CH_2-O\right)_n$$

and

$$R_{13}-O\left(CH_2-CH-CH_2-O\right)_{m}$$

- R<sub>12</sub> and R<sub>13</sub>, which may be identical or different, are each chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted;
- n ranges from 1 to 10; and
- m ranges from 1 to 6; and
- R<sub>10</sub> and R<sub>11</sub>, which may be identical or different, are each chosen from H; linear alkyl groups, branched alkyl groups and cyclic alkyl groups, wherein said alkyl groups are optionally substituted; and linear alkenyl groups, branched alkenyl groups and cyclic alkenyl groups, wherein said alkenyl groups are optionally substituted.

89. (Original) The method according to claim 88, wherein  $R_9$  is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups and cyclic  $C_8$  to  $C_{22}$  alkyl groups, wherein said  $C_8$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups and cyclic  $C_8$  to  $C_{22}$  alkenyl groups, wherein said  $C_8$  to  $C_{22}$  alkenyl groups are optionally substituted.

- 90. (Original) The method according to claim 88, wherein  $R_{10}$  and  $R_{11}$  are each chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups, wherein said  $C_1$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said  $C_1$  to  $C_{22}$  alkenyl groups are optionally substituted.
- 91. (Original) The method according to claim 88, wherein at least one of said  $R_{10}$  and said  $R_{11}$  is chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said alkyl groups and said alkenyl groups are substituted with at least one hydroxyl group.
- 92. (Original) The method according to claim 88, wherein at least one of said  $R_{10}$  and said  $R_{11}$  is chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said alkyl groups further comprise at least one ether group in the alkyl chain, and further wherein said alkenyl groups further comprise at least one ether group in the alkenyl chain.

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93. (Original) The method according to claim 57, wherein said at least one fatty amide is chosen from behenamide, cetyl-PG hydroxyethyl decanamide, cetyl-PG hydroxyethyl palmitamide, cocamide, dibutyl lauroyl glutamide, distearyl phthalic acid amide, lauramide, lauroyl methyl glucamide, myristoyl-PG hydroxyethyl decanamide, oleyl palmitamide, stearamide, tallow amide, trideceth-2 carboxamide monoethanolamine (trideceth-2 carboxamide MEA), trideceth-2 carboxamide diethanolamine (trideceth-2 carboxamide DEA), trideceth-2 carboxamide monoisopropanolamine (trideceth-2 carboxamide MIPA), and polyalkoxylated fatty amides.

- 94. (Original) The method according to claim 93, wherein said polyalkoxylated fatty amides are chosen from polyethoxylated fatty amides and polyglycerylated fatty amides.
- 95. (Original) The method according to claim 57, wherein said at least one cationic homopolymer is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 96. (Original) The method according to claim 95, wherein said at least one cationic homopolymer is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 97. (Original) The method according to claim 96, wherein said at least one cationic homopolymer is present in an amount ranging from 0.25% to 2.5% by weight relative to the total weight of the composition.

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(Original) The method according to claim 57, wherein said at least one fatty 98. alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.

- 99. (Original) The method according to claim 98, wherein said at least one fatty alcohol is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.
- 100. (Original) The method according to claim 99, wherein said at least one fatty alcohol is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.
- 101. (Original) The method according to claim 57, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 102. (Original) The method according to claim 101, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- (Original) The method according to claim 102, wherein said at least one 103. alkoxylated fatty alcohol is present in an amount ranging from 0.2% to 2% by weight relative to the total weight of the composition.

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104. (Original) The method according to claim 57, wherein said at least one fatty amide is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.

105. (Original) The method according to claim 104, wherein said at least one fatty amide is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.

106. (Original) The method according to claim 105, wherein said at least one fatty amide is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.

- 107. (Previously Presented) The method according to claim 57, further comprising:
  - (e) at least one oxidizing agent,

wherein said at least one oxidizing agent is chosen from hydrogen peroxides, bromate salts, percarbonate salts, perborate salts and enzymes.

- 108. (Previously Presented) The method according to claim 57, further comprising:
  - (e) at least one oxidizing agent,

wherein said at least one oxidizing agent is present in an amount ranging from 0.1% to 20.0% by weight relative to the total weight of the composition.

109. (Original) The method according to claim 107, wherein said at least one oxidizing agent is present in an amount ranging from 0.5% to 12.0% by weight relative to the total weight of the composition.

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110. (Original) A method for treating keratinous fibers comprising applying to said keratinous fibers at least one treatment composition comprising an oxidizing composition, wherein said oxidizing composition comprises:

(a) at least one cationic homopolymer comprising repeating units of formula (I):

- $R_1$ ,  $R_2$ , and  $R_3$ , which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
- R<sub>4</sub> is chosen from groups comprising at least one quaternary amino group;
- (b) at least one fatty alcohol;
- (c) at least one alkoxylated fatty alcohol; and
- (d) at least one fatty amide.
- 111. (Original) The method according to claim 110, wherein said at least one treatment composition is chosen from a dyeing composition, a bleaching composition, a permanent waving composition, and a relaxing composition.

112. (Original) The method according to claim 110, wherein said said at least one cationic homopolymer, said at least one fatty alcohol, said at least one alkoxylated fatty alcohol, and said at least one fatty amide are present in a combined amount effective to provide physical stability to said oxidizing composition.

- 113. (Original) The method according to claim 110, wherein said alkyl groups of  $R_1$ ,  $R_2$  and  $R_3$  are chosen from linear  $C_1$  to  $C_{20}$  alkyl groups, branched  $C_1$  to  $C_{20}$  alkyl groups, and cyclic  $C_1$  to  $C_{20}$  alkyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkyl groups are optionally substituted.
- 114. (Original) The method according to claim 110, wherein said alkenyl groups of  $R_1$ ,  $R_2$  and  $R_3$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl groups, branched  $C_1$  to  $C_{20}$  alkenyl groups and cyclic  $C_1$  to  $C_{20}$  alkenyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.
- 115. (Original) The method according to claim 110, wherein  $R_1$ ,  $R_2$ , and  $R_3$  are each H.
- 116. (Original) The method according to claim 110, wherein  $R_1$  is H,  $R_2$  is H, and  $R_3$  is  $CH_3$ .
- 117. (Original) The method according to claim 110, wherein, in the definition of  $R_4$ , said groups comprising at least one quaternary amino group are chosen from  $C_1$  to  $C_{20}$  alkyl quaternary amino groups.

118. (Original) The method according to claim 110, wherein in the definition of R<sub>4</sub>, said groups comprising at least one quaternary amino group are chosen from compounds of formula (II):

- R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub>, which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
- R<sub>8</sub> is chosen from alkylene groups and alkenylene groups.
- 119. (Original) The method according to claim 118, wherein said alkyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkyl groups, branched  $C_1$  to  $C_{20}$  alkyl groups and cyclic  $C_1$  to  $C_{20}$  alkyl groups, and further wherein said  $C_1$  to  $C_{20}$  alkyl groups are optionally substituted.
- 120. (Original) The method according to claim 119, wherein said alkenyl groups of  $R_5$ ,  $R_6$ , and  $R_7$  are chosen from linear  $C_1$  to  $C_{20}$  alkenyl chains, branched  $C_1$  to  $C_{20}$  alkenyl chains and cyclic  $C_1$  to  $C_{20}$  alkenyl chains, and further wherein said  $C_1$  to  $C_{20}$  alkenyl groups are optionally substituted.

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121. (Original) The method according to claim 119, wherein said alkylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkylene groups, branched  $C_1$  to  $C_{20}$  alkylene groups and cyclic  $C_1$  to  $C_{20}$  alkylene groups, and further wherein said  $C_1$  to  $C_{20}$  alkylene groups are optionally substituted.

122. (Original) The method according to claim 119, wherein said alkenylene groups of  $R_8$  are chosen from linear  $C_1$  to  $C_{20}$  alkenylene chains, branched  $C_1$  to  $C_{20}$  alkenylene chains and cyclic  $C_1$  to  $C_{20}$  alkenylene chains, and further wherein said  $C_1$  to  $C_{20}$  alkenylene groups are optionally substituted.

123. (Original) The method according to claim 119, wherein said groups comprising at least one quaternary amino group are chosen from:

$$(CH_3)_3N^+-CH_2-;$$

$$(CH_3)_3N^+-(CH_2)_2-;$$

$$(CH_3)_3N^+-(CH_2)_3-$$
; and

$$(CH_3)_3N^+$$
- $(CH_2)_4$ -.

- 124. (Original) The method according to claim 119, wherein  $R_5$  is a methyl group,  $R_6$  is a methyl group,  $R_7$  is an alkyl group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkyl groups, and  $R_8$  is an alkylene group chosen from linear unsubstituted  $C_2$  to  $C_{10}$  alkylene groups.
- 125. (Original) The method according to claim 119, wherein  $R_5$ ,  $R_6$ , and  $R_7$  are each a methyl group, and  $R_8$  is an alkylene group chosen from linear  $C_2$  to  $C_{10}$  alkylene groups, branched  $C_2$  to  $C_{10}$  alkylene groups, and cyclic  $C_2$  to  $C_{10}$  alkylene groups.

126. (Original) The method according to claim 110, wherein said at least one cationic homopolymer is chosen from polyquaternium-37 homopolymers.

- 127. (Original) The method according to claim 110, wherein said at least one fatty alcohol comprises at least 8 carbon atoms.
- 128. (Original) The method according to claim 127, wherein said at least one fatty alcohol comprises at least 10 carbon atoms.
- 129. (Original) The method according to claim 128, wherein said at least one fatty alcohol comprises at least 12 carbon atoms.
- 130. (Original) The method according to claim 110, wherein said at least one fatty alcohol is chosen from  $C_9$ - $C_{11}$  alcohols,  $C_{12}$ - $C_{13}$  alcohols,  $C_{12}$ - $C_{15}$  alcohols,  $C_{12}$ - $C_{16}$  alcohols, and  $C_{14}$ - $C_{15}$  alcohols.
- 131. (Original) The method according to claim 110, wherein said at least one fatty alcohol is chosen from arachidyl alcohol, behenyl alcohol, caprylic alcohol, cetearyl alcohol, cetyl alcohol, coconut alcohol, decyl alcohol, hydrogenated tallow alcohol, jojoba alcohol, lauryl alcohol, myristyl alcohol, oleyl alcohol, palm alcohol, palm kernel alcohol, stearyl alcohol, tallow alcohol, and tridecyl alcohol.
- 132. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol is chosen from fatty alcohols comprising at least one polyethylene glycol ether.

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133. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol comprises at least 8 carbon atoms.

- 134. (Original) The method according to claim 133, wherein said at least one alkoxylated fatty alcohol comprises at least 10 carbon atoms.
- 135. (Original) The method according to claim 134, wherein said at least one alkoxylated fatty alcohol comprises at least 12 carbon atoms.
- 136. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol is chosen from ethoxylated fatty alcohols of formula  $R(OCH_2CH_2)_nOH$

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted; and
  - n ranges from 2 to 100.
- 137. (Original) The method according to claim 136, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.

138. (Original) The method according to claim 136, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups, and cyclic  $C_8$  to  $C_{22}$  alkenyl groups.

139. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol is chosen from alkoxy esters of polyglyceryl of the formula

R(OCH<sub>2</sub>CHOHCH<sub>2</sub>)<sub>n</sub>OH

and alkoxy esters of polyglyceryl of the formula

H(OCH<sub>2</sub>CHOR'CH<sub>2</sub>)<sub>n</sub>OH

- R is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups optionally substituted;
- R' is chosen from H; linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups optionally substituted; and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms,

wherein said alkenyl groups are optionally substituted; and - n ranges from 1 to 30,

with the proviso that at least one of said R' is chosen from linear alkyl groups comprising at least 5 carbon atoms, branched alkyl groups comprising at least 5 carbon atoms, and cyclic alkyl groups comprising at least 5 carbon atoms, wherein said alkyl groups are optionally substituted, and linear alkenyl groups comprising at least 5 carbon atoms, branched alkenyl groups comprising at least 5 carbon atoms, and cyclic alkenyl groups comprising at least 5 carbon atoms, wherein said alkenyl groups are optionally substituted.

- 140. (Original) The method according to claim 139, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups, and cyclic  $C_8$  to  $C_{22}$  alkyl groups.
- 141. (Previously Presented) The method according to claim 139, wherein R is chosen from linear  $C_8$  to  $C_{22}$  alkenyl groups, branched  $C_8$  to  $C_{22}$  alkenyl groups.
- 142. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol is chosen from ceteareth-2, ceteareth-3, ceteareth-4, ceteareth-5, ceteareth-6, ceteareth-7, ceteareth-8, ceteareth-9, ceteareth-10, ceteareth-11, ceteareth-12, ceteareth-13, ceteareth-14, ceteareth-15, ceteareth-16, ceteareth-17, ceteareth-18, ceteareth-20, ceteareth-22, ceteareth-23, ceteareth-24, ceteareth-25, ceteareth-27, ceteareth-28, ceteareth-29, ceteareth-30, ceteareth-33, ceteareth-34,

ceteareth-40, ceteareth-50, ceteareth-55, ceteareth-60, ceteareth-80, ceteareth-100, laureth-1, laureth-2, laureth-3, laureth-4, laureth-5, laureth-6, laureth-7, laureth-8, laureth-9, laureth-10, laureth-11, laureth-12, laureth-13, laureth-14, laureth-15, laureth-16, laureth-20, laureth-23, laureth-25, laureth-30, laureth-40, deceth-3, deceth-5, oleth-5, oleth-30, steareth-2, steareth-10, steareth-20, steareth-100, cetylsteareth-12, ceteareth-5, ceteareth-5, polyglyceryl 4-lauryl ether, polyglyceryl 4-oleyl ether, polyglyceryl 2-oleyl ether, polyglyceryl 6-cetyl ether, polyglyceryl 6-oleylcetyl ether, polyglyceryl 6-octadecyl ether, C<sub>9</sub>-C<sub>11</sub> pareth-3, C<sub>9</sub>-C<sub>11</sub> pareth-6, C<sub>11</sub>-C<sub>15</sub> pareth-3, C<sub>11</sub>-C<sub>15</sub> pareth-12, C<sub>11</sub>-C<sub>15</sub> pareth-12, C<sub>12</sub>-C<sub>15</sub> pareth-12, and C<sub>22</sub>-C<sub>24</sub> pareth-33.

143. (Original) The method according to claim 110, wherein said at least one fatty amide is chosen from fatty amides of formula

$$R_9$$
— $CH_2$ — $C$ — $N$ 
 $R_{10}$ 
 $R_{11}$ 

wherein:

- R<sub>9</sub> is chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted; and alkoxylated

alkyl groups of formulae

$$R_{12}$$
-O(CH<sub>2</sub>-CH<sub>2</sub>-O)

and

$$R_{13}$$
-O- $\left(CH_2$ -CH-CH<sub>2</sub>-O $\right)_m$ 

- R<sub>12</sub> and R<sub>13</sub>, which may be identical or different, are each chosen from linear alkyl groups comprising at least 4 carbon atoms, branched alkyl groups comprising at least 4 carbon atoms, and cyclic alkyl groups comprising at least 4 carbon atoms, wherein said alkyl groups are optionally substituted; and linear alkenyl groups comprising at least 4 carbon atoms, branched alkenyl groups comprising at least 4 carbon atoms, and cyclic alkenyl groups comprising at least 4 carbon atoms, wherein said alkenyl groups are optionally substituted;
- n ranges from 1 to 10; and
- m ranges from 1 to 6; and
- R<sub>10</sub> and R<sub>11</sub>, which may be identical or different, are each chosen from H; linear alkyl groups, branched alkyl groups and cyclic alkyl groups, wherein said alkyl groups are optionally substituted; and linear alkenyl groups, branched alkenyl groups and cyclic alkenyl groups, wherein said alkenyl groups are optionally substituted.

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144. (Original) The method according to claim 143, wherein  $R_9$  is chosen from linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups and cyclic  $C_8$  to  $C_{22}$  alkyl groups, wherein said  $C_8$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_8$  to  $C_{22}$  alkyl groups, branched  $C_8$  to  $C_{22}$  alkyl groups and cyclic  $C_8$  to  $C_{22}$  alkenyl groups, wherein

said C<sub>8</sub> to C<sub>22</sub> alkyl groups are optionally substituted.

- 145. (Original) The method according to claim 143, wherein  $R_{10}$  and  $R_{11}$  are each chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups, wherein said  $C_1$  to  $C_{22}$  alkyl groups are optionally substituted; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said  $C_1$  to  $C_{22}$  alkenyl groups are optionally substituted.
- 146. (Original) The method according to claim 143, wherein at least one of said  $R_{10}$  and said  $R_{11}$  is chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said alkyl groups and said alkenyl groups are substituted with at least one hydroxyl group.
- 147. (Original) The method according to claim 143, wherein at least one of said  $R_{10}$  and said  $R_{11}$  is chosen from linear  $C_1$  to  $C_{22}$  alkyl groups, branched  $C_1$  to  $C_{22}$  alkyl groups and cyclic  $C_1$  to  $C_{22}$  alkyl groups; and linear  $C_1$  to  $C_{22}$  alkenyl groups, branched  $C_1$  to  $C_{22}$  alkenyl groups and cyclic  $C_1$  to  $C_{22}$  alkenyl groups, wherein said alkyl groups further comprise at least one ether group in the alkyl chain, and further wherein said alkenyl groups further comprise at least one ether group in the alkenyl chain.

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148. (Original) The method according to claim 110, wherein said at least one fatty amide is chosen from behenamide, cetyl-PG hydroxyethyl decanamide, cetyl-PG hydroxyethyl palmitamide, cocamide, dibutyl lauroyl glutamide, distearyl phthalic acid amide, lauramide, lauroyl methyl glucamide, myristoyl-PG hydroxyethyl decanamide, oleyl palmitamide, stearamide, tallow amide, trideceth-2 carboxamide monoethanolamine (trideceth-2 carboxamide MEA), trideceth-2 carboxamide diethanolamine (trideceth-2 carboxamide DEA), trideceth-2 carboxamide monoisopropanolamine (trideceth-2 carboxamide MIPA), and polyalkoxylated fatty amides.

- 149. (Original) The method according to claim 148, wherein said polyalkoxylated fatty amides are chosen from polyethoxylated fatty amides and polyglycerylated fatty amides.
- 150. (Original) The method according to claim 110, wherein said at least one cationic homopolymer is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 151. (Original) The method according to claim 150, wherein said at least one cationic homopolymer is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 152. (Original) The method according to claim 151, wherein said at least one cationic homopolymer is present in an amount ranging from 0.25% to 2.5% by weight relative to the total weight of the composition.

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153. (Original) The method according to claim 110, wherein said at least one fatty alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.

- 154. (Original) The method according to claim 153, wherein said at least one fatty alcohol is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.
- 155. (Original) The method according to claim 154, wherein said at least one fatty alcohol is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.
- 156. (Original) The method according to claim 110, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 157. (Original) The method according to claim 156, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 158. (Original) The method according to claim 157, wherein said at least one alkoxylated fatty alcohol is present in an amount ranging from 0.2% to 2% by weight relative to the total weight of the composition.

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159. (Original) The method according to claim 110, wherein said at least one fatty amide is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.

- 160. (Original) The method according to claim 159, wherein said at least one fatty amide is present in an amount ranging from 0.1% to 8% by weight relative to the total weight of the composition.
- 161. (Original) The method according to claim 160, wherein said at least one fatty amide is present in an amount ranging from 0.2% to 4% by weight relative to the total weight of the composition.
- 162. (Previously Presented) The method according to claim 110, further comprising:
  - (e) at least one oxidizing agent,

wherein said at least one oxidizing agent is chosen from hydrogen peroxides, bromate salts, percarbonate salts, perborate salts and enzymes.

- 163. (Previously Presented) The method according to claim 110, further comprising:
  - (e) at least one oxidizing agent,

wherein said at least one oxidizing agent is present in an amount ranging from 0.1% to 20.0% by weight relative to the total weight of the composition.

164. (Original) The method according to claim 163, wherein said at least one oxidizing agent is present in an amount ranging from 0.5% to 12.0% by weight relative to the total weight of the composition.

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165. (Original) The method according to claim 110, wherein said keratinous fibers are chosen from hair, eyelashes, and eyebrows.

- 166. (Original) A multi-compartment kit for treating keratinous fibers, said kit comprising at least two separate compartments, wherein a first compartment comprises an oxidizing composition, said oxidizing composition comprising:
  - (a) at least one cationic homopolymer comprising repeating units of formula (I):

$$\begin{bmatrix}
R_{1} & R_{3} \\
 & | & | \\
 & C & C \\
 & | & | \\
 & R_{2} & C = 0 \\
 & OR_{4}
\end{bmatrix}$$
(I)

- $R_1$ ,  $R_2$ , and  $R_3$ , which may be identical or different, are each chosen from H, alkyl groups, and alkenyl groups; and
- R<sub>4</sub> is chosen from groups comprising at least one quaternary amino group;
- (b) at least one fatty alcohol;
- (c) at least one alkoxylated fatty alcohol;
- (d) at least one fatty amide; and

a second compartment comprising a composition for treating said keratinous fibers.

167. (Original) A multi-compartment kit according to claim 166, wherein said composition for treating said keratinous fibers is chosen from a dyeing composition, a bleaching composition, a permanent waving composition, and a relaxing composition.

168. (Original) A multi-compartment kit according to claim 166, wherein said keratinous fibers are chosen from hair, eyelashes, and eyebrows.

## Evidence Appendix to Appeal Brief Under Rule 41.37(c)(1)(ix)

No evidence submitted pursuant to §§ 1.130-1.132 or any other evidence entered by the Office is relied upon by Appellants in this appeal.

## Related Proceedings Appendix to Appeal Brief Under Rule 41.37(c)(1)(x)

No decisions in related proceedings were identified in this Appeal Brief.